CLAIMS

- 1 1. (Currently Amended) A process of preparing ortho substituted phenylamines comprising
- 2 contacting phenylhydroxylamine, optionally substituted with at least one inert substituent,
- with a nucleophilic reagent in the presence of a manganese oxide at a temperature between
- 4 about 10° C and about 170° C and a pressure from subatmospheric to superatmospheric such
- 5 that an ortho substituted phenylamine, optionally correspondingly substituted with at least
- one inert substituent, is predominantly formed.
- 2. (Original) The process of claim 1 wherein the phenylhydroxylamine is unsubstituted
- 2 phenylhydroxylamine.
- 3. (Original) The process of claim 1 wherein the phenylhydroxylamine is substituted with at
- least one member selected from the group consisting of C_1 - C_{10} alkyl, C_6 - C_{10} aryl, and C_6 - C_{10}
- 3 alkaryl moieties.
- 4. (Original) The process of claim 1 wherein the nucleophilic reagent is selected from the
- 2 group consisting of ammonia, water, C₁-C₂₀ aliphatic alcohols, phenols, halides, and amines
- having the formula R'₂NH wherein each R' may independently be a hydrogen, C₁-C₂₀
- 4 aliphatic, C_4 - C_8 alicyclic, or C_6 - C_{15} aryl or alkaryl moiety.
- 5. (Original) The process of claim 1 wherein the nucleophilic reagent is an amine represented
- by the formula R'₂NH wherein each R' is independently a hydrogen, C₁-C₅ alkyl, or C₆-C₁₀
- 3 phenyl or alkyl-substituted phenyl moiety.
- 6. (Original) The process of claim 5 wherein the nucleophilic reagent is aniline.
- 7. (Original) The process of claim 1 wherein the molar ratio of nucleophilic reagent to
- 2 phenylhydroxylamine ranges from about 2 to about 100.
- 8. (Currently Amended) A process for preparing ortho substituted phenylamines comprising

contracting phenylhydroxylamine, optionally substituted with at least one inert substituent, with a nucleophilic reagent, the molar ratio of nucleophilic reagent to phenylhydroxylamine ranging from about 2 to about 100, the contacting of the phenylhydroxylamine and nucleophilic reagent being conducted in the absence of oxygen and in the presence of a catalyst that is a cryptomelane-type manganese oxide Octahedral Molecular Sieve, with a composition of KMn₈O₁₆·nH₂O (n = 0.5-10) in which said molecular sieve comprises MnO₆ octahedral structural units that are edge and corner shared to form a 4.6 x 4.6 tunnels as a result of 2 x 2 arrangement of octahedra, in which the potassium ions are present in the tunnels with a small amount of water and said potassium ions are ion-exchanged by H⁺ ions using nitric acid to obtain the acidic form of said sieve at temperatures ranging from about 70° C to about 120° C, whereby an optionally-substituted ortho substituted phenylamine is formed in amounts equal to or greater than any concurrently formed para isomer.

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9. (Original) The process of claim 8 wherein the phenylhydroxylamine is unsubstituted phenylhydroxylamine.

10. (Original) The process of claim 8 wherein the nucleophilic reagent is selected from the group consisting of ammonia, water, C_1 - C_{20} aliphatic alcohols, phenols, halides, and amines having the formula R'_2NH wherein each R' may independently be a hydrogen, C_1 - C_{20} aliphatic, C_4 - C_8 alicyclic, or C_6 - C_{15} aryl or alkaryl moiety.

11. (Original) The process of claim 8 wherein the nucleophilic reagent is aniline.

12. (Original) The process of claim 8 wherein the ortho substituted phenylamine is represented by the formula:

NH₂

9 wherein R^2 is hydrogen or at least one C_1 - C_{10} alkyl moiety, and X is selected from hydroxy,

halo, C₁-C₂₀ alkoxy, phenoxy, and amino of the formula -NR'₂ wherein each R' is

independently a C_1 - C_{20} aliphatic, C_4 - C_8 alicyclic, or C_6 - C_{15} aryl or alkaryl moiety.

1 13. (Original) The process of claim 12 wherein X is amino and the ortho substituted

2 phenylamine is a o-phenylenediamine.

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5 6 14. (Currently Amended) The process of claim 13 wherein theorthothe ortho substituted

phenylamine is o-aminodiphenylamine represented by the formula:

NH₂